AEROFLEX

A passion for performance.

# Avionics

## Test Equipment

Aeroflex's avionics test equipment is used to design, manufacture, test and maintain commercial, private and military airborne electronic systems. With the quality and performance you have come to expect from Aeroflex, our innovative avionics test solutions provide the critical data needed to insure a safe flying environment.

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**www.aeroflex.com**

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# APM-424(V)4 and APM-424(V)5

## Flightline Interrogator /Transponder Test Set

The APM-424(V)4 Test Set easily accommodates a variety of aircraft and ground/shipboard platforms to test transponder and interrogator performance including Mode S Elementary and Enhanced Surveillance (Mode 5 upgradeable).

The APM-424(V)5 has all the functionality of the APM-424(V)4 plus MK XIIA Mode 5 testing in accordance with DoD AIMS International Program Office requirements. The test set exceeds U.S. Military requirements for safety and environmental conditions.

- **Transponder test modes 1, 2, 3/A, C, 4, S and Mode 5**
- **Mode S Elementary and Enhanced Surveillance**
- **Interrogator test modes 1, 2, 3/A, C, 4, S, TCAS, E-TCAS and Mode 5**
- **Point and shoot operation**

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# IFF-45TS

## Transponder/Interrogator/TACAN Bench Test Set

The IFF-45TS is an RF signal simulator that provides support for AIMS Mark XIIA transponders and interrogators. It operates under remote control from a computer or ATE system and provides versatile signal generation and measurement capability of Mark XIIA system signals in bench and over-the-air applications.

- **AIMS certified for 03-1000A, Change 3**
- **Dual I/O for diversity transponder or sum/difference interrogator testing**
- **Separate RF I/O for direct connection to equipment under test, or connection to antennas for over-the-air testing**
- **Crypto appliqués supported: KIV-77, KIV-78, KIV-6, KIT/KIR-IC**
- **Software Defined Radio design provides waveform flexibility and future growth potential**
- **Antenna ports provide one watt signal generator outputs and -60 dBm sensitive receivers to allow for extended range over-the-air testing**
- **Can produce levels above MTL at up to 10,000 ft. (greater distances or power levels are achievable with a directional antenna)**
- **Remote interfaces: GPIB, USB, RS-232 and Ethernet**

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# IFR 6000
## Flightline Test Set

The IFR 6000 is a compact, lightweight and weatherproof unit designed for testing MODE A/C/S transponder, DME, TCAS, 1090 MHz ADS-B and TIS Avionics Systems.

- **Mode S level 1-4 (level automatically determined) FAR Part 43 appendix F (Including proposed Eurocontrol extension), Eurocontrol Elementary and Enhanced Surveillance, ADS-B TX/RX and TIS**
- **ICAO Annex 10 amendment 77**
- **Quickly and easily provides accurate measurement of transponder transmitting frequency, power and receiver sensitivity. Predetermined configurations for testing any class of transponder.**
- **Tests any DME 1 MHz spaced X or Y channel. Measurements include: interrogator transmitter frequency/peak power, Pulse Repetition Frequency (PRF), P1/P2 width and pulse spacing. Provides accurate range and velocity simulation, station ident, squitter control.**
- **Simulates the airborne environment necessary to allow verification/certification of proper operation of an aircraft's TCAS I and II installations.**
- **Detachable directional antenna**
- **Large 5.7-inch LCD display**
- **Simple user interface**
- **Lightweight and compact <8 lbs. (3.6 kg)**

# IFR 6015

## Military Flightline Test Set

The IFR 6015 is a compact, lightweight and weatherproof unit designed for testing Modes 1, 2, 3/A, C, S transponder, DME, TCAS, ADS-B, TIS, military E-TCAS and TACAN avionics systems.

- **Mode S level 1-4 (level automatically determined) FAR Part 43 appendix F (including proposed Eurocontrol extension), Eurocontrol Elementary and Enhanced Surveillance, ADS-B TX/RX and TIS**
- **ICAO Annex 10 amendment 77**
- **Quickly and easily provides accurate measurement of transponder transmitting frequency, power and receiver sensitivity. Predetermined configurations for testing any class of transponder.**
- **Tests any DME 1 MHz spaced X or Y channel. Measurements include: interrogator transmitter frequency/peak power, Pulse Repetition Frequency (PRF), P1/P2 width and pulse spacing. Provides accurate range and velocity simulation, station ident and squitter control.**
- **Simulates the airborne environment necessary to allow verification/certification of proper operation of an aircraft's TCAS I and II installations.**
- **Detachable directional antenna**
- **Large 5.7-inch LCD display**
- **Simple user interface**
- **Lightweight and compact <8 lbs. (3.6 kg)**

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# UC-584

## Universal Transponder Antenna Coupler

### Used with IFR 6000/6015 Flightline Test Set

The UC-584 is designed to solve the problem of reliable FAR Part 43 Appendix 'F' ERP (Effective Radiated Power) and transponder MTL (Minimum Trigger Level) testing in the high multi-path ramp and hangar environments. The antenna coupler mounts directly over the aircraft's transponder antenna and is retained in place with a toggle action grip. The antenna coupler is connected to the IFR 6000/6015 direct-connect port.

- **Reliable FAR Part 43 Appendix 'F' ERP and MTL testing in high multi-path environments**
- **Provides >20 dB of antenna isolation for Mode S transponder altitude and diversity tests**
- **<1 dB repeatability**
- **Rugged design for ramp use**
- **Fits most 'Shark Fin' L-Band antenna's**
- **+Quick action antenna grip/release action**

# SDX 2000

## Transponder/Interrogator/DME Test Set

Designed in cooperation with the world's leading DME Transponder and IFF manufacturers, the SDX 2000 provides complete test capability for all commercial and military pulsed L-Band avionics: ATCRBS and Mode-S Transponder (including data link), DME, TACAN and IFF (Identification Friend or Foe).

- **Intuitive screens and menus reduce user training**
- **Maximum test capability in a single tester**
- **Increased reliability**
- **Reduced calibration time and expense**
- **Updates for industry changes accomplished by software downloads**

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# ATC-1400A

## Transponder/DME Test Set

The ATC-1400A Transponder/DME test set provides complete bench testing capability of modern ATC transponders and DME equipment. When used in conjunction with the T-1401, S-1403DL/MDL or SI-1404 the testing capability of the ATC-1400A can be expanded for TACAN, Mode 4/IFF or Mode S transponders, making it the most versatile pulse RF source in the avionics test equipment industry.

- **Continuous display of UUT PRF, % reply, transmitter frequency and power**
- **Variable SLS and echo pulse level**
- **Digital display of decoded transponder reply pulse**
- **VOR pairing or direct UHF frequency selection**
- **Acceleration, velocity and range DME modes**
- **Variable interference and double interrogation pulse position**
- **IEEE 488-1978 GPIB interface**

# T-1401
## TACAN Accessory Unit

The T-1401 TACAN Accessory Unit is designed to interface with the ATC-1400A Transponder/DME test set and provide the full range of TACAN bearing and DME simulation required to test and service Air-to-Air, Ground-to-Air and inverse TACAN airborne equipment.

- **Programmable air-to-air interrogation rate**
- **Programmable bearing/rate selection**
- **Identifies air-to-air replies from UUT**

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# S-1403DL/MLD

## Mode S Accessory Unit

The S-1403DL/MLD Mode S Accessory Unit for the ATC-1400A supports the new Mode S Data Link and ADS-B (extended DF17 squitter). The "DL" is backward compatible with the S-1403C model. Current ATE programs implemented on the S-1403C will operate with the S-1403DL/MLD without program changes. The unit provides additional pulse code modulation, as specified by RTCA/DO-181 to the ATC-1400A for testing Mode S Transponders. The MLD (Multi-Level Diversity) function is for testing Mode S Transponders with MLD requirements.

- **Over 30 screens, including support for MTL, Comm C and Comm D formats**
- **Mode S interrogation up to 2500 PRF burst**
- **PRF generator from 99.999 sec to 2500 Hz**
- **Flash memory for easy firmware upgrades**
- **Control of $P_2$, $P_3$, $P_4$ and $P_6$ width, offset and amplitude**
- **Fixed frequency/fixed level RF output for diversity antenna testing**
- **Continuous rotation "SLEW" control as an alternate to keypad data entry**
- **User definable screens for user specific tests**
- **Remote operation via IEEE 488.2-1987 GPIB or RS-232**

# SI-1404

## MK12/Mode S IFF Accessory Unit

The SI-1404 is a Depot Level/3rd Line test accessory, used in conjunction with the ATC-1400A Transponder/ DME test set, for testing IFF transponders in a maintenance or production environment. The SI-1404 and ATC-1400A form a comprehensive SSR ground station simulator capable of parametric and protocol testing MK10A (Mode 1, 2, 3/A, C), MK12 (Mode 1, 2, 3/A, 4, C) and MK12/Mode S transponders.

- **Accurate measurement of transponder reply pulse parameters**
- **Configuration memory stores 5 complete SI-1404 configurations**
- **Extended squitter DF 17 capability**
- **Mode 4 crypto simulation plus external crypto interface**
- **Built-in self-test**
- **LCD display with adjustable back-light**
- **IEEE-488.2 GPIB & RS-232 interface**

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# IFF-701Ti

## Transponder/Interrogator Test Set

The IFF-701Ti is an organizational level/1st Line, portable battery operated test set for testing IFF transponders and interrogators installed in airborne, naval or land based platforms. The IFF-701Ti may also be used at an intermediate level/2nd Line.

- **Accurate measurement of transponder/interrogator transmitting frequency, power and receiver sensitivity**
- **GO/NO-GO or Diagnostic operation**
- **Mode 4 Stored Code/Crypto operation**
- **Built-in self-test**
- **TCAS/E-TCAS test capability**
- **Hand-held directional antenna**
- **Compliant with test requirements of FAR Part 43 Appendix 'F'**
- **Verify and certify the operation of MK10A, MK12 and MK12/Mode S IFF transponders**
- **KIT/KIR-TSEC IA/IC interface**
- **Universal line supply**
- **External DC operation/battery charge**
- **28 VDC output for crypto power**
- **3+ hour battery operation**

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# RGS 2000

## TCAS Reply Generator

The RGS 2000 TCAS Reply Generator is a self-contained RF Test Station designed to be a complete RF resource for the testing of TCAS (Traffic Alert and Collision Avoidance System) computers. User-friendly menus displayed on the electroluminescent flat panel display allow the operator to:

- **Decode and display Mode S and Mode C interrogation data**
- **Measure and display port-to-port relative amplitude and phase of interrogation signal**
- **Measure and display interrogation pulse characteristics including peak pulse power, pulse frequency, pulse spacing, pulse width, and pulse rise/fall time**
- **Measure and display interrogation pulse frequency spectrum**
- **Simulate up to 154 intruders including generation of Mode S and Mode C instrument replies, Mode S squitter, Mode C fruit and intruder movement simulation**
- **Perform manual or GPIB controlled testing**

# IFR 4000

## Nav/Comm Flightline Test Set

The IFR 4000 Navigational Communications Flightline Test Set verifies the operation and installation of ILS, VOR and Marker Beacon receivers and VHF AM/FM and UHF AM transceivers. The IFR 4000 with its lightweight size (under 8 lbs.), long run time battery (8 hrs) and ergonomic design will provide the user with the most portable navigational communications ramp test set on the market today.

- **Accurate measurement of VHF/UHF transmitter, frequency, output power, modulation (AM and FM and receiver sensitivity)**
- **Generation of ARINC 596 Selective Calling Tones**
- **Accurate measurement of VHF/UHF antenna and or feeder SWR (Standing Wave Ratio)**
- **Simulation of Localizer and Glideslope (CAT I, II and III) signals with variable DDM settings**
- **Swept Localizer DDM for coupled Auto Pilot testing (Simultaneous Localizer, Glideslope and Marker signals)**
- **Simulation of VOR Beacon with variable bearing**
- **Simulation of Marker Beacon, Selectable Airways (Z), Outer and Middle Marker Tones**
- **Optional ELT test capability**
- **Guided test capability cuts down total test time**
- **5.7 inch LCD display with user adjustable backlight and contrast**

# ATB-7300

## Avionics Test Bench

The ATB-7300 Avionics Test Bench is a configurable platform designed for avionics test. It has multi-system test capability as a stand-alone instrument or in a system ATE configuration.

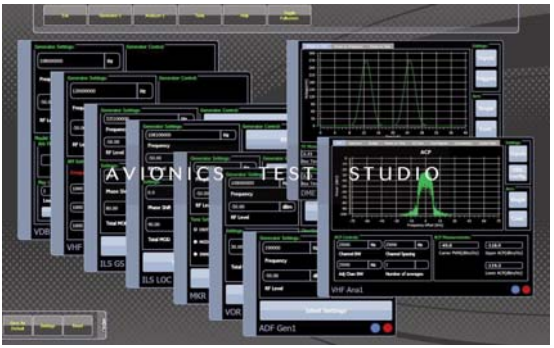
### Standard Features

- **Tests ILS / VOR / MKR / ADF and VHF COMM functions, including SELCAL**
- **Large touch screen color display**
- **Software drivers fully compatible with Aeroflex NAV-2000R and Collins 479S-6A GPIB command sets**
- **ANSI C DLL Drivers compatible with Microsoft® Visual Studio® and National Instruments™ LabWindows™/ CVI™ and TestStand™**
- **Aeroflex Avionics Test Studio® graphical user interface**
- **Sample C++ code segments are provided to simplify customized user programming needs**

### Optional Features

- **406 MHz COSPAS / SARSAT Beacon (ELT) test**
- **VHF Comm TX and DME TX analyzer (250 kHz to 3 GHz)**
- **VDLM-2 Comm analyzer**

# Avionics Test Studio®




Avionics Test Studio® is a collection of software defined PXI instruments designed to aid avionics facilities with testing and troubleshooting of avionics electronic units and modules.

Avionics Test Studio® can be used both as a bench top troubleshooting tool and within an ATE environment. All signal parameters can be controlled from the graphical user interface (GUI) as software defined instruments or from your choice of programming language as DLL calls.

Features:

- **Utilizes the Aeroflex 3000 Series PXI cards**
- **Tests and analyzes traditional NAV/COMM functions as well as the latest airborne datalink protocols, VHF Datalink Mode 2 (ref. ARINC Specification 631-4)**
- **ANSI C DLL Drivers that can be called from any modern test environment**
- **Comprehensive help files**
- **Level accuracy ±0.3 dB typically CW**
- **Low phase noise typically -143 dBc/Hz at 20 kHz offset**
- **Software drivers fully compatible with Aeroflex NAV2000R, including Collins 479S-6A GPIB command set**

# NAV-750C/2030 Series Option 6

## Avionics Signal Generator

Option 6, on the 2030 Series signal generator, extends the functionality to a fully featured avionics test instrument that tests airborne ILS (Instrument Landing System), VOR (VHF Omnidirectional Radio Range), MKR (Marker Beacon), ADF (Automatic Direction Finder), and SELCAL (Selective Calling) systems. The NAV-750C/2030 Series Option 6 also incorporates a microprocessor controlled signal generator test function, covering a frequency range of 10 kHz to 1.35 GHz.

- **RF output from -144 dBm to +13 dBm with 0.1 dB resolution**
- **RF output power displayed in dBm, µV, mV or V EMF**
- **Paired LOC - G/S frequencies**
- **SDM range 0 to 99.9% in 0.1% steps**
- **DDM range 0 to 20% in 0.01% steps and 20% to 99.9% in 0.1% steps**
- **VOR bearing selectable in 0.10 steps, accuracy ± 0.050**

# NAV-750C/2030 Series Option 10

## Avionics DME Signal Generator

DME (Distance Measuring Equipment) provides aircraft with accurate and continuous information of their slant range distance from a ground reference point. Option 10, on the 2030 Series signal generators, produces the necessary signals required to test DME transponders. The option consists of two parts - an internal pulse generator to produce double pulses, and a linear RF modulator which produces the required Gaussian shaping with 90% of the transmitted energy within a bandwidth of 0.5 MHz in accordance with EUROCAE ED57. Front and rear panel connectors provide External Trigger input and Synchronization and Video outputs.

- **Generates DME Gaussian shaped double pulses**
- **Variable pulse parameters**
- **Gaussian pulse spectrum**
- **Sync and Video outputs**
- **External trigger input**
- **Simple user interface with large screen**
- **GPIB programmable**
- **VOR/ILS/Marker Beacons with option 6**

# 2948B

## Low Noise Communications Service Monitor

The 2948B Low Noise Communications Service Monitor with Option 25 offers an impressive range of features for the aircraft and avionics maintenance industry. The dedicated 2948B provides signals for testing the following: ILS receivers for localizer including identification, glideslope and markers; VOR beacon receivers with identification; SELCAL selective calling receivers.

- **Avionics modes for ILS, VOR, marker beacons and SELCAL**
- **Extensive pre-sets for avionics functions DDM and Bearing**
- **Auto-increment of VOR Bearing for aircraft display testing**
- **DC operation from aircraft power supplies or internal batteries**
- **Avionics testing in both Direct and 'Off Air' configurations**

# MLS-800

## Microwave Landing System/ Ground Station Simulator

The MLS-800 is a microprocessor controlled simulator, designed to test airborne MLS angle receivers on the bench or verify system operation on the ramp. The parameters displayed on the MLS test menu are in accordance with the RTCA/DO-177 specifications and EUROCAE ED-53A.

- **Complete main-path simulation**
- **Control of all beam parameters**
- **Sync capability**
- **Simulates all basic data words plus auxiliary data words with parity selection**
- **Full range of MLS channels**
- **OCI control for left, right and rear**
- **75 db AZ or EL ratio capability**
- **Propeller/rotor modulation from 1 to 100 Hz variable in 1 Hz steps**
- **Morse Code identification capability**

# MLS-801

## Microwave Landing System Ramp Test Set

The MLS-801 ramp test set provides Go/No-Go verification of the Microwave Landing System angle receiver installed in an aircraft. The test set generates a single channel signal that includes all necessary AM and DPSK modulation for testing of the azimuth, elevation, back azimuth and clearance functions as well as all basic data words in their standard test conditions. Controls are also provided for angle offset, deviation and slewing in order to allow the operator to exercise the Glideslope and Localizer deviation, to observe control surface motion and to test offset approach angles.

- **Automatic Test Sequence mode to allow one person operation**
- **Dynamic Slew capability**
- **Control Motion deflection position to test auto-pilot coupling**
- **Complete simulation of the MLS transmission cycle**
- **Left and Right Clearance pulse simulation**
- **Manual deflection controls for both Azimuth and Elevation**

# RD-301A

## Weather Radar Test Set

The RD-301A X-Band Weather Radar simulator, when used with an oscilloscope, provides complete and comprehensive testing and alignment capability for aircraft and marine radar systems. The RD-301A will respond to radar transmitter pulse widths of >50 ns.

- **Automatic transmitter magnetron frequency tracking and digital read-out**
- **PRF generator and digital read-out**
- **Internal/External modulation for testing turbulence detection radars**
- **Contour mode test**
- **Heterodyne monitor output**
- **Transmitter effective and peak power measurements**
- **Radar UUT sensitivity testing**
- **Attenuated RF sample of UUT signal for pulse spectrum analysis**

# RDX-7708

## Weather Radar Test Set

The RDX-7708 Test Set provides RF source and monitor for complete RF testing of ARINC 708 T/R (Transmitter/Receiver) units including wind shear variants. Transmitter power measurement is via a waveguide mounted RF power module. This method minimizes measurement errors due to RF coaxial cable loss variations.

- **Endorsed by OEM Weather Radar System manufacturers**
- **Built-in Doppler shift**
- **Digital readout of output frequency or PRF**
- **Digital readout of transmitter power PRF controlled manually, or by transmitter or external sync input**
- **Pulse width manually controlled, equal to transmitter input or 270 microseconds (fixed)**
- **GPIB programmable**

# GPSG-1000

## Portable Satellite Simulator

The GPSG-1000 uses modular technology for RF and baseband signal generation to produce highly accurate and repeatable test results. Unlike bench top simulators, Aeroflex's approach also allows the test system to be easily upgraded.

Some of the many features of the GPSG-1000 include:

- **Simulation of GPS L1C, L2C, L5 signals, supporting the modernization of signals used by the latest designs of GPS receivers**
- **Simulation of Galileo E1, E5, E6 signals to support unencrypted services**
- **SBAS, WAAS/EGNOS L1, L5 for automatic SBAS simulation**
- **Built-in GPS C/A code receiver for automatic GPS almanac download**
- **Dynamic waypoint navigation, a 3D navigation scheme that allows airport-to-airport flight plan simulation**
- **Programmable satellite parameters allow specific tests to be conducted to determine receiver behavior under degraded or invalid signal conditions**
- **Large touch-screen display with simple user interface**
- **Available in a 6 or 12 channel configuration**

# GPS-101

## Satellite Simulator

The GPS-101 Satellite Simulator is a cost effective tool for testing the performance and integrity of GPS receiver installations. The "direct connect" mode can be used for bench maintenance. The GPS-101 simulates a single satellite's signal and data patterns with the following characteristics:

- **Generates GPS frequency "L1" 1575.42 MHz**
- **Doppler shift and selectable generator output modes**
- **Adjustable RF Level from -85 to -145 dBm in 1 dB steps**
- **Simulates SV codes 1 to 37**
- **NAV data that contains programmable almanac information and GPS week and time of week fields**
- **Internal real-time clock that keeps 24 hour time and is programmable by the user**
- **6 hour battery operation**

**Note: Does not perform positional simulation**

# ALT-8000

## FMCW/Pulse Radio Altimeter Flightline Test Set

The ALT-8000 is a lightweight universal test set for 4.3 GHz FMCW (frequency modulated continuous carrier wave) radio altimeters and pulse radio altimeters with a large 12-inch color touch screen for ease of use. The ALT-8000 may be directly coupled to the radio altimeter transmitter/receiver (TX/RX) ports or may be connected via supplied TX/RX antenna couplers. Problems are identified with a positive diagnosis and a confirmed resolution, reducing NFF (no fault found) occurrences and reducing the airline LRUs (line replaceable units) inventory.

- **Tests FMCW radio altimeters including CDF types**
- **Tests pulse radio altimeters (non-pulse compression types)**
- **Direct-connect to UUT T/R or to installed system via antenna couplers**
- **Ratio-metric RF loop test allows TX, RX, antenna or feeder faults to be identified**
- **Multi-channel operation (via additional test sets)**
- **Programmable multi-leg climb/descend profiles**
- **Remote control interface USB/LAN**

# 429 Hand-held Series Transmitter/Receiver

## 429E, 429EX, 429EB, 429EBP, 429EXR

The 429 Hand-held Transmitter/Receiver and Data Bus Analyzer provides avionics technicians and line maintenance personnel with an easy method for troubleshooting ARINC 429 labels and has the capability to selectively trap labels three separate ways. Select units have non-volatile memory and features user selectable ARINC Air Transport Equipment Identifier Codes. Transmitted and received data can be viewed in either hexadecimal or easy-to-understand engineering format.

The unit is housed in a rugged, compact case with internal, rechargeable Ni Cad batteries. It comes with either 115V or 220V plug-in battery charger.

- **Transmit 10 labels simultaneously**
- **Non-volatile memory (429EX and 429EBP only)**
- **Data slewing of non-RF labels (429EX and 429EBP only)**
- **User selection of Hex I.D. for display of data through ARINC 429-11**
- **Trigger trap capabilities for block data protocols and alpha-numeric messages**
- **Automatic scrolling of trapped data**
- **Easy access to radio system frequency screens (ADF, DME, HF, VHF, VOR/ILS and ATC)**
- **Printer port (429EBP only)**
- **Unique label definitions to test Boeing aircraft avionics (429EBP only)**
- **Rack-mountable (429EXR only)**

# DT200

## ARINC 429 Databus Analyzer

The DT200 will handle all your troubleshooting needs with a unit that conveniently supports two avionics databus standards, ARINC 429 and CSDB (Commercial Standard Digital Bus). Basic receive and transmit capabilities are extensive. The DT200 has the ability to manage many data words, clearly display subfields, and manipulate data with such features as freeze, scroll and clear.

- **CSDB capability for Collins ProLine Avionics**
- **Lightweight, battery operated**
- **Manages multiple data words**
- **Clearly displays subfields**
- **Manipulates data with such features as Freeze, Scroll and Clear**
- **Dual operation in either ARINC 429 or CSDB modes**
- **Data display in hexadecimal, binary or engineering units**
- **General purpose recording mode for lab or flight tests**
- **Operates 4-6 hours between charges**

# DT350H

## Honeywell ASCB Analyzer

The DT350H is a portable, battery operated, hand-held bus analyzer supporting all versions of the Honeywell/GAMA ASCB Bus.

- **ASCB-A, B, and C in one unit**
- **Two receive and one transmit port**
- **Easy menu-driven setup allows intuitive control of unit**
- **Reprogrammable scaling database**
- **Powerful Record and Breakpoint modes**
- **Four hours of operation from internal battery or operation from 110-220 VAC**
- **RS-232C and DAC interfaces**

# DT400

## ARINC 429 Databus Analyzer

The DT400 Databus Analyzer combines many powerful tools and features to support your digital avionics. Data may be read from up to four buses and displayed in a number of possible formats including graphic plots. Using the DT400's many diagnostic functions, it is much easier to isolate troublesome intermittent data. A suspect LRU can be monitored for hours with a breakpoint condition programmed to capture and display fault information. BITE mode provides a very effective tool for interrogating maintenance data from ARINC 604 avionics. Here are some of the DT400's powerful features:

- **Up to four receive and four transmit ports**
- **Displays ARINC 604 BITE messages**
- **16-channel data recorder**
- **RS-232C and DAC ports for download and conversion**
- **Sophisticated analyzer features including breakpoint, history, etc.**
- **Eight display formats including engineering units and graphic plots**
- **Dynamic transmit patterns**
- **User defined labels and transmit tables**

# DT400H

## ARINC 429 Databus Analyzer

The DT400H is a hand-held databus analyzer providing powerful capabilities in a lightweight, durable unit you can pack in a briefcase or carry to the flightline.

- **Lightweight, hand-held unit**
- **16-line, backlit display**
- **User-friendly operation**
- **Record up to 240 screens for later download to PC/printer**
- **Many labels displayed simultaneously**
- **Fully compatible with all other DATATRAC test equipment and PC-based support programs**
- **Proven reliability!**

# DT600

## ARINC 429/629 Databus Analyzer

The DT600 is a powerful tool used on the ramp or on the bench. Basic receive and transmit functions are implemented along with a general RECORD and BREAKPOINT mode. The standard RS-232C port is used for downloading new label/word definitions. The DAC port can be used to provide a trigger pulse or to drive recorders or instruments. The large multi-window display and integrated keyboard provide an informative and intuitive user interface with data in eight different formats, including user defined and graphic plots.

**DT600 ARINC 429/629 Databus Analyzer**

- **Two ARINC TX/RX ports and two ARINC 629 transceiver ports**
- **Operates 6-8 hours on internal battery or powered from external 28 VDC or 105-250 VAC**
- **RS-232C and DAC interface ports standard; GPIB optional**
- **Williamsburg Protocol software extension available for ARINC 429 file transfer functions**

# T1200B

## ARINC 429 Control Display Unit

The venerable T1200, a mainstay in avionics shops worldwide, has been upgraded to extend its reliability and service life. The display has been replaced by a more reliable, external, touch sensitive color Liquid Crystal Display (LCD). Any system utilizing the ARINC 429 databus can be served with the universal T1200B CDU (Control Display Unit). The result is an unprecedented level of equipment compatibility - from on-board systems all the way through bench testing and sub-component applications.

- **External 12 inch touch screen display allows main unit to be located away from operation**
- **PS-2 style mouse may be used with or without touch screen**
- **May be ordered with front or rear display connectors**
- **Easy-to-use menu selection of avionics test formats**
- **Test formats that follow specific OEM avionics CMM's**
- **Up to 10 words transmitted on each channel**
- **Transmission and reception of all ARINC 429 words**
- **Ability to decode VOR, ILS, ADF, VHF, HF, DME, LRA, and ATC associated words as well as all other BCD and BNR data words into easily recognizable engineering units**
- **Two low speed and two high speed ARINC 429 transmitter/receiver cards**

# PSD30-2AF
## Universal DC Capacitance Test Set

The PSD30-2AF is designed to calibrate and troubleshoot any DC capacitive fuel quantity system. The PSD30-2AF can perform the following functions:

- **Measure the capacitance or insulation resistance of any DC capacitive fuel quantity system with required aircraft specific interface cable (not included)**
- **Simulate the capacitance of any DC fuel quantity system to calibrate or troubleshoot the system**
- **Measure the DC voltage to the fuel quantity gauge in the range of 0-40 VDC in .01 VDC increments**

*Note: Aircraft-specific interface cables are required and must be purchased separately. Contact Aeroflex for your application.*

# PSD60-1AF

## AC Capacitance Fuel Quantity Test Set

The PSD60-1AF is designed to calibrate and troubleshoot any "AC" capacitive fuel, oil or LOX quantity system. This venerable test set is utilized extensively by rotary and fixed-wing military aircraft operators around the world.

- **Measure the capacitance of any AC capacitive fuel, oil, or LOX quantity transmitter, or sets of transmitters connected in parallel**
- **Simulate either one or two capacitors simultaneously to calibrate any AC capacitive liquid quantity gauging system**
- **Measure the insulation resistance in megohms of capacitive liquid quantity transmitters (probes) and/or aircraft wiring**

*Note: Aircraft-specific interface cables are required and must be purchased separately. Contact Aeroflex for your application.*

# PSD60-2R

## Fuel Quantity Test Set

The PSD60-2R is an accurate, highly reliable, portable capacitance test set. Along with an aircraft specific interface, the PSD60-2R will test any AC Capacitive Fuel, Water, LOX, Engine Oil or other AC capacitance system.

- **Measurement of total tank capacitance, individual tank units and compensators**
- **Simulation of capacitance for indicator calibration**
- **Simulation of compensator capacitance value for dry calibration**
- **Measurement of the insulation resistance of tank units and aircraft harness**
- **Measurement of coax center conductor to shield for fault isolation**
- **Display of capacitance resolution to 0.00 pF for accurate individual tank unit testing (to 199.99 pF)**

*Note: Aircraft-specific interface cables are required and must be purchased separately. Contact Aeroflex for your application.*

# PSD90-1C

## AC/DC Fuel Capacitance Test Set

The PSD90-1C Universal AC/DC Capacitance Test Set will test any AC or DC Capacitive Fuel, Water, LOX, Engine Oil or other AC capacitance system. The PSD90-1C has new features that allow the user to better troubleshoot and isolate fuel system problems. Rugged in design, the unit can be used anywhere troubleshooting is required. Capable of being operated with external power, the PSD90-1C is ideal for shop or Depot Level repair of fuel system components.

- **Easy to operate/calibrate**
- **Closed box calibration using front panel controls - performed annually**
- **Lightweight/portable**
- **Rechargeable battery or externally powered**
- **Percent of battery capacity displayed**
- **Self-test on power-up**
- **Measures DC voltage**
- **Manual or Auto Ranging**
- **Two and three wire megger testing**
- **Compliant with Boeing Spec 10-61959 Rev H**

*Note: Aircraft-specific interface cables are required and must be purchased separately. Contact Aeroflex for your application.*

# Fuel Interfaces

Aeroflex has a large selection of aircraft-specific interface cables supporting many rotary and fixed wing aircraft.

Depending upon the aircraft, Aeroflex interface units:

- **Provide FQIS interface at various points on the aircraft for complete testing**
- **Provide interface to probes (tank units), wiring harnesses, indicators, signal conditioners, etc.**
- **Provide level sensor and/or thermistor testing**
- **Provide densitometer and compensator testing**

Aeroflex supports over 200 different aircraft. Contact us for a quote for your specific application.

# RF Expansion Module

## for Cassidian ATEC® Series 6 ATE

The RF Expansion Module (RFEM) is designed to support testing of airborne RF components on the ATEC® Series 6 ATE. Developed and manufactured by Aeroflex Test Solutions in partnership with Cassidian, the RFEM provides a convenient platform that is completely compatible with new and existing ATEC® Series 6 ATE systems.

- **Aeroflex designed RF test system, fully integrated into the ATEC® Series 6**
- **Simple Ethernet interface between RFEM and ATEC® Series 6, permits easy retrofit to existing ATE installations**
- **Global service and support provided jointly by Cassidian and Aeroflex**
- **Extensive CMM-listed TPS library in development or planned, covering Nav, Comm, TCAS, Transponder, SATCOM, GPS, and other RF systems**
- **Complete RFEM and TPS information can be consulted on the Cassidian Customer Support and Services MyATE Internet web site**

Aeroflex is committed to the quality of its Avionics Test Equipment. This is why we have established Aeroflex Regional Service Centers and Factory Certified Calibration Centers around the world. Please utilize the center closest to you.

## Aeroflex Avionics Service Centers

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# Certified Calibration Centers

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*This list is current at time of publishing. Aeroflex maitains an ongoing process of approving avionics service centers worldwide. For the most up-to-date list of sales, service and support centers visit www.aeroflex.com.*

**For the latest list and technical specifications of Aeroflex products please visit**

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web **www.aeroflex.com**

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Part No. 46891/514
Issue 8
10/2011